Discovery Labs Announces FDA Approval of SURFAXIN® (lucinactant) for Prevention of Respiratory Distress Syndrome

SURFAXIN is the First FDA-Approved Synthetic, Peptide-Containing Surfactant

Conference Call Tomorrow at 10 a.m. EST

Warrington, PA — March 06, 2012— Discovery Laboratories, Inc. (NASDAQ: DSCO), a specialty biotechnology company dedicated to advancing a new standard in respiratory critical care, today announced that the United States Food and Drug Administration (FDA) has approved SURFAXIN (lucinactant) for the prevention of Respiratory Distress Syndrome (RDS) in premature infants at high risk for RDS. SURFAXIN is the first synthetic, peptide-containing surfactant approved for use in neonatal medicine. Discovery Labs anticipates that SURFAXIN will be commercially available in the United States in late 2012.

"The approval of SURFAXIN is an important medical advancement for the neonatology community and parents of preterm infants who will soon have an effective alternative to animal-derived surfactants to prevent the development of RDS," said W. Thomas Amick, Chairman of the Board and Chief Executive Officer of Discovery Labs. "This is a significant milestone in our continuing efforts to develop a pipeline of products to further advance the standard of respiratory critical care."

RDS is a condition in which premature infants are born with an insufficient amount of pulmonary surfactant, a substance produced naturally in the lungs and essential for breathing. Today, infants with RDS often require animal-derived surfactant replacement therapy along with mechanical ventilation to survive. Approximately 90,000 premature infants in the United States are treated annually with currently available animal-derived surfactants.

Discovery Labs will hold a conference call tomorrow, March 7th, 2012 at 10:00 a.m. EST to further discuss the foregoing. The call in number is (877) 215-0093. The international call in number is (706) 679-3237. The passcode is 58400332. This audio webcast will be available through a live broadcast on the Internet at http://us.meeting-stream.com/discoverylaboratories_030212 and www.discoverylabs.com. The replay number to hear the conference call is (855) 859-2056 or (404) 537-3406 using the same conference call password listed above.

ABOUT SURFAXIN

SURFAXIN (lucinactant intratracheal suspension) is a synthetic, peptide-containing surfactant. SURFAXIN is indicated for the prevention of respiratory distress syndrome

(RDS) in premature infants at high risk for RDS. The safety and efficacy of SURFAXIN for the prevention of RDS in premature infants was demonstrated in a large, multinational phase 3 clinical program that included 1294 patients. Discovery Labs anticipates that SURFAXIN will be commercially available in late 2012.

IMPORTANT SAFETY INFORMATION

SURFAXIN (lucinactant intratracheal suspension) is intended for intratracheal use only. The administration of exogenous surfactants, including SURFAXIN, can rapidly affect oxygenation and lung compliance. SURFAXIN should be administered only by clinicians trained and experienced with intubation, ventilator management, and general care of premature infants in a highly supervised clinical setting. Infants receiving SURFAXIN should receive frequent clinical assessments so that oxygen and ventilatory support can be modified to respond to changes in respiratory status.

Most common adverse reactions associated with the use of SURFAXIN are endotracheal tube reflux, pallor, endotracheal tube obstruction, and need for dose interruption. During SURFAXIN administration, if bradycardia, oxygen desaturation, endotracheal tube reflux, or airway obstruction occurs, administration should be interrupted and the infant's clinical condition assessed and stabilized. SURFAXIN is not indicated for use in acute respiratory distress syndrome (ARDS).

For more information about SURFAXIN, please visit www.surfaxin.com.

ABOUT DISCOVERY LABS

Discovery Laboratories, Inc. is a specialty biotechnology company with one focus – to advance a new standard in respiratory critical care. Discovery Labs' novel proprietary KL_4 surfactant technology produces a synthetic, peptide-containing surfactant that is structurally similar to pulmonary surfactant and is being developed in liquid, lyophilized, and aerosolized dosage forms. Discovery Labs is also developing its proprietary drug delivery technologies to enable efficient delivery of aerosolized KL_4 surfactant and other inhaled therapies. Discovery Labs believes that its proprietary technologies make it possible, for the first time, to develop a significant pipeline of products to address a variety of respiratory diseases for which there frequently are few or no approved therapies. For more information, please visit our website at www.Discoverylabs.com.

Forward-Looking Statements

To the extent that statements in this press release are not strictly historical, all such statements are forward-looking, and are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from the statements made. Examples of such risks and uncertainties, including those related to the timing of a commercial launch of SURFAXIN and market acceptance of SURFAXIN, are described in Discovery Labs' filings with the Securities and Exchange Commission including the most recent reports on Forms 10-K, 10-Q and 8-K, and any

amendments thereto. Any forward-looking statement in this release speaks only as of the date on which it is made. The Company assumes no obligation to update or revise any forward-looking statements.

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